ABSTRACT

A video scaler optimizes the display properties of an image so that as little image is lost as possible while occupying as much of the screen as possible. By so doing, a high definition image can be made larger without losing all of edges of the picture. According to one aspect of the present invention, a method for displaying a 16:9 aspect ratio image on a 4:3 aspect ratio screen provides that the image is proportionally increased so that approximately 13% of the image is lost at the sides while approximately only 13% of the screen is unused at the top and bottom. Similarly, a method for displaying a 4:3 aspect ratio image on a 16:9 aspect ratio screen provides that the image is proportionally increased so that approximately 13% of the image is lost at the top and bottom while approximately only 13% of the screen is unused at the sides. According to yet another aspect of the present invention, the viewer can control the scaling ratio of the image so that the percentage of lost image varies from zero to its maximum, e.g., 25% for a 4:3 aspect ratio image and a 16:9 aspect ratio screen.